

DEPARTMENT OF STATE REVENUE

01-20181626.LOF
01-20181627.LOF
01-20181628.LOF**Letter of Findings: 01-20181626; 01-20181627; 01-20181628
Individual Income Tax
For the Years 2014 and 2015**

NOTICE: IC § 6-8.1-3-3.5 and IC § 4-22-7-7 require the publication of this document in the Indiana Register. This document provides the general public with information about the Department's official position concerning a specific set of facts and issues. This document is effective on its date of publication and remains in effect until the date it is superseded or deleted by the publication of another document in the Indiana Register. The "Holding" section of this document is provided for the convenience of the reader and is not part of the analysis contained in this Letter of Findings.

HOLDING

Subject to the Department's review of its employees' contemporaneously prepared timesheets delineating the extent to which research was conducted on individual components, the Department agreed that Indiana Manufacturer of electric power modules and generator enclosures met its burden of establishing that it engaged in qualifying research activities in the development and construction of individual components thereby entitling it to at least a portion of the Research and Development credits originally claimed.

ISSUE**I. Individual Adjusted Gross Income Tax - Qualified Research Expense Projects and Documentation.**

Authority: IC § 6-3-1-3.5(b); IC § 6-3.1-4-1; IC § 6-3.1-4-2(a); IC § 6-8.1-5-1(c); IC § 6-8.1-5-4(a); *New Colonial Ice Co. v. Helvering*, 292 U.S. 435 (1934); *United States v. McFerrin*, 570 F.3d 672 (5th Cir. 2009); *Stinson Estate v. United States*, 214 F.3d 846 (7th Cir. 2000); *Conklin v. Town of Cambridge City*, 58 Ind. 130 (1877); *Lafayette Square Amoco, Inc. v. Indiana Dep't of State Revenue*, 867 N.E.2d 289 (Ind. Tax Ct. 2007); *Indiana Dep't. of State Revenue, Sales Tax Division v. RCA Corp.*, 310 N.E.2d 96 (Ind. Ct. App. 1974); *Union Carbide Corp. and Subsidiaries, v. C.I.R.*, 97 T.C.M. 1207 (2009); I.R.C. § 41(d); Treas. Reg. § 1.41-4; Letter of Findings 01-20171187, 01-20171188, 01-20171189, 01-20171190 (May 2, 2018); Letter of Findings 01-20170279, 01-20170288 (October 6, 2017); Letter of Findings 01-20160696, 01-20160697, 01-20160698, 01-20160700, 01-20160701, 01-20160702, 01-20160703 (June 27, 2017); Letter of Findings 01-20150385 (December 12, 2016); *Noise Level Chart*, <https://www.noisehelp.com/noise-level-chart.html>.

Taxpayer argues that it conducted qualified, experimental research activities, that it can adequately document the wage expenses related to those projects, and that it is now entitled to claim the benefit of credits associated with the qualifying activities.

STATEMENT OF FACTS

Taxpayers are individual shareholders/owners of an Indiana company which designs and fabricates electric power modules and generator enclosures. The Indiana company develops power modules and generator enclosures for customers based on each power module and enclosure's design requirements.

For simplicity's sake, this Letter of Findings will hereinafter designate the Indiana company as "Taxpayer" because Indiana company is an S corporation which originally claimed the now disputed credits. Any business income - or tax liability - is "passed through" to the individual shareholders. It is those "pass-through" tax credits that are here in dispute.

Taxpayer engaged a consulting firm to review its 2013, 2014, and 2015 business activities and prepare a "research and expense study." In a research credit study report issued in 2015, the consulting firm concluded that Taxpayer conducted qualified research activities entitling it to claim Indiana labor, supply, and service research expense tax credits which in turn passed on to the shareholders and reduced their own income tax liability.

The shareholders reported and claimed the "flow-through" credits on their individual income tax returns. Taxpayer claimed that it incurred approximately \$2,700,000 in qualified research expenses entitling it to claim approximately \$200,000 in research and expense credits for the years 2014 and 2015.

The Indiana Department of Revenue ("Department") thereafter conducted an income tax audit of Taxpayer. The Department's audit reviewed Taxpayer's tax returns, business records, and manufacturing records. The audit resulted in a decision denying all the Taxpayer's originally claimed research credits along with the credits which had "flowed through" and been claimed on the shareholders' individual income tax returns. On the ground that they were not entitled to the flow-through credits, the Department assessed the individual shareholders additional individual income tax because Taxpayer had not established it was entitled to claim the original credits.

The Department issued the proposed assessments because it concluded that Taxpayer's activities did not meet the definition of "qualified research." The audit also concluded that Taxpayer was unable to verify the amount of time during which Taxpayer's employees were purportedly engaged in activities which met the definition of "qualified research." As a result of the credit denial, the Department issued the shareholders proposed assessments of additional income tax.

Taxpayer disagreed with the Department's decision disallowing the credits and the shareholder assessments. Taxpayer submitted a protest to that effect. An administrative hearing was conducted during which Taxpayer's representatives explained the basis for the protest. This Letter of Findings results.

I. Individual Adjusted Gross Income Tax - Qualified Research Expense Projects and Documentation.

DISCUSSION

The issue is whether Taxpayer conducted qualifying research activities and whether it can document the extent to which Taxpayer conducted those qualifying activities.

A. Department's Audit Examination.

1. Qualifying Research Projects.

During the years 2013, 2014, and 2015, Taxpayer claimed approximately \$3,900,000 in qualifying research expenses ("QREs") entitling it to approximately \$270,000 in Indiana Research Expense Tax Credits ("RECs"). For the 2014 and 2015 years here at issue, Taxpayer claimed approximately \$2,700,000 in QREs entitling it to approximately \$200,000 in RECs. The "qualifying expenses" stemmed largely from wage expenses but also - to a lesser extent - supply and patent attorney costs.

The Department's audit concluded that the company's activities did not "overcome the 4-part test" required under I.R.C. § 41(d) which defines "qualified research" as research:

1. With respect to which expenditures may be treated as expenses under section 174[;]
2. Which is undertaken for the purposes of *discovering information* and which is technological in nature [also known as the Discovery Test[;]
3. The application of which is intended to be useful in the development of a *new or improved business component* of the taxpayer; and
4. Substantially all of the activities which constitute elements of a process of experimentation for a [qualifying purpose]. (*Emphasis added*).

I.R.C. § 41(d) sets out this four-pronged test for verifying qualified research activities. First, the research must have qualified as a business deduction under I.R.C. § 174. I.R.C. § 41(d)(1)(A). Second, the research must be undertaken to discover information "which is technological in nature." I.R.C. § 41(d)(1)(B)(i). Third, the taxpayer must intend to use the information to develop a new or improved business component. I.R.C. § 41(d)(1)(B)(ii). Finally, the taxpayer must pursue a "process of experimentation" during substantially all of the research. I.R.C. § 41(d)(1)(C).

(a) Business Deduction.

As to the first of the four tests, the Department's audit agreed that Taxpayer's "expenditures [were] related to the trade."

(b) Discovering Technological Information.

As to the second of the four tests, the Department's audit did not agree that Taxpayer's activities led to the

discovery of information or technology which expanded upon and added to the common knowledge of other electrical contractors. As authority for its position, the Department cited to Treas. Reg. § 1.41-4(a)(3)(i) of the 2001 Final Regulations which states:

For purposes of section 41(d) and this section, research is undertaken for the purpose of *discovering information* only if it is undertaken to obtain knowledge that exceeds, expands, or *refines the common knowledge* of skilled professionals in a particular field of science or engineering. (*Emphasis added*).

T.D. 8930, 66 F.R. 280-01 at 290.

The audit cited to Treas. Reg. § 1.41-4(a)(3)(ii) (T.D. 8930) for the definition of "common knowledge." The regulation provides:

Common knowledge of skilled professionals in a particular field of science or engineering means information that should be known to skilled professionals had they performed, before the research in question is undertaken, a reasonable investigation of the existing level of information in the particular field of science or engineering.

The audit noted that Taxpayer had been in the business of fabricating its power modules and generator enclosures for many years and had employees who were well versed in mechanical and electrical engineering including CAD (computer-aided design and drafting) design. However, the audit found:

[T]axpayer is certain of its capability to build the [power module and generator] enclosure[s] before taking on the project. They know there are going to be some technical challenges but this is part of any project they do and they have done this before. An engineer's educational background helps them to overcome these technical challenges using their acquired knowledge.

The audit concluded that the claimed expenses did not qualify for the credits because Taxpayer was "not discovering information that is technological in nature" but was simply conducting a reasonable and well-trodden investigatory process of an existing level of information. As explained in the audit report:

[T]axpayer is conducting a reasonable investigation of the existing level of information (customer requirements, existing engineering knowledge and manufacturing capabilities) and makes decisions on how to proceed in completing the [power module and generator] project it was contracted to complete. In other words, given a set of facts, the [T]axpayer's personnel know what to do and how to proceed. The information being gathered is considered common knowledge of a skilled professional and is not considered qualified research.

The audit emphasized that Taxpayer relied on its past technical and engineering experience and would not have attempted to design a power module or generator if it did not already have the education and experience to do so and that "[n]either the customer [n]or the [T]axpayer would enter into these [power module and generator] contracts to do the jobs if the [T]axpayer was not capable of completing the jobs." Instead, "[B]oth the customer and the [T]axpayer know that the [T]axpayer has the education and experience to prepare the appropriate design based on customer's requirements when they enter into the contracts."

(c) New or Improved Business Component.

As to the third of the four tests, the audit stated that every QRE expense claimant must "tie the qualified research expenses it is claiming for the credit to the relevant business component. The audit found that Taxpayer failed to adequately "tie" the expenses to any of its projects. Instead when questioned about this standard, the audit found that Taxpayer was only able to cite to the consulting firm's "research and expense study," but the audit criticized this singular reliance because "[t]here was no detail as how [the study's] estimates were arrived or documents to support it." As to the third test, the audit concluded:

Taxpayer was unable to provide any information at the business component level. Therefore, the [T]axpayer did not demonstrate that it met the third test that it intended to use the information to develop a new or improved business component.

(d) Undertaking a Process of Experimentation.

Finally, as to the fourth test, the audit relied on Treas. Reg. § 1.41-4(a)(5) (T.D. 8930) which states:

A process of experimentation is a process to evaluate more than one alternative designed to achieve a result where the capability or method of achieving that result is uncertain at the outset. A process of experimentation does not include the evaluation of alternatives to establish the appropriate design of a business component, if the capability and method for developing or improving the business component are not uncertain.

The audit found that Taxpayer failed to meet the "experimentation" standard. As stated in the audit report, "[T]axpayer's capability and method for developing or improving the business component are very certain." Instead, "[T]axpayer has been in the business for many years and has several employees with education/experience to do the job."

Even though the [T]axpayer may not know every detail of the final design when it signs the contracts with the customer, both the customer and the [T]axpayer know that the [T]axpayer has the education/experience to prepare the appropriate design based on the customer's requirements and the environment where the product is to be placed/installed."

The audit concluded that under Treas. Reg. § 1.41-4(a)(5) (T.D. 8930), Taxpayer failed to meet the requirement that claimant must engage in a process of "experimentation" because "the [T]axpayer's capability and method for developing or improving the business component are certain [and] the [T]axpayer's evaluation of an alternative to establish the appropriate design is not a process of experimentation."

The audit took an additional step by evaluating the experimentation standard under the Treas. Reg. § 1.41-4(a)(5) (T.D. 9104) less restrictive "uncertainty test." Although not applicable for the years at issue, the audit concluded that Taxpayer also failed to meet this less restrictive uncertainty test. The audit report stated:

[U]ncertainty concerning the development or improvement of the business component . . . does not establish that all activities undertaken to achieve that new or improved business component constitute a process of experimentation. [M]erely demonstrating that uncertainty has been eliminated . . . is insufficient to satisfy the process of experimentation requirement.

In other words, even under Treas. Reg. § 1.41-4(a)(5) (T.D. 9104), any "uncertainty" at the outset of a Taxpayer project was insufficient to meet the experimentation standard.

2. Documenting and Substantiating the Credit.

Even assuming that Taxpayer established that it was engaged in qualifying research activities, the Department's audit found that Taxpayer failed to adequately document the time and labor expenses which formed a substantial basis for the claimed research credits. Most relevant, the audit found that Taxpayer failed to meet the documentation and substantiation standard under Treas. Reg. § 1.41-4(d) (T.D. 8930). The regulation sets out the record keeping and documentation requirement for expenses related to the research credit:

No credit shall be allowed under section 41 with regard to an expenditure relating to a research project unless the taxpayer - (1) Prepares documentation *before or during the early stages of the research project*, that describes the principal questions to be answered and the information the taxpayer seeks to obtain to satisfy the requirements of paragraph (a)(3) of this section, and retains that documentation on paper or electronically in the manner prescribed in applicable regulations, revenue rulings, revenue procedures, or other appropriate guidance until such time as taxes may no longer be assessed (except under section 6501(c)(1), (2), or (3)) for any year in which the taxpayer claims to have qualified research expenditures in connection with the research project; and (2) Satisfies section 6001 and regulations there under.

(Emphasis added).

The audit report also pointed out to Indiana's own record keeping requirement.

Every person subject to a listed tax must keep books and records so that the department can determine the amount, if any, of the person's liability for that tax by reviewing those books and records. The records referred to in this subsection include all source documents necessary to determine the tax, including invoices, register tapes, receipts and canceled checks. IC § 6-8.1-5-4(a).

The audit report summarized the standard under which it evaluated Taxpayer's efforts to verify the labor expenses

stating that "[t]he common theme in all of the legal authorities . . . is that the [T]axpayer must keep records to substantiate the amounts reported on its returns" and Taxpayer "must have contemporaneous documentation that was prepared before or in the early stages of the research project that describes the principal questions to be answered and the information the [T]axpayer seeks to obtain."

Under any of these standards, the audit found that "[T]axpayer ha[d] not provided records to substantiate its qualification for the credit or to substantiate the amount of the credit."

The audit discounted Taxpayer's principal reliance on the consulting firm's "research and expense study" which based its own evaluation on an "employee research and experimentation time allocation questionnaire." The audit found that these "estimates" were "incomplete and insufficient" and the employee questionnaire "was general in nature and did not provide any specifics concerning what the employees did or how much time they spent completing qualified research activities."

B. Taxpayer's Response.

1. Qualifying Research Projects.

Taxpayer disagrees with the Department's conclusion that it does not engage in qualifying research activities. Taxpayer explains that each power module or generator component is engineered, designed, tested, and built to meet site specific technical requirements - such as local seismic hazards and extreme weather conditions:

[Taxpayer] designs new products that are outside the scope of common industry knowledge. [Taxpayer's] main business is designing and building new power modules and generator enclosures custom electric power systems for [Customers]. Because those are new product designs with newly designed, integrated subcomponents, substantial R&D is required in order to discover information that exceeds common industry knowledge. If the information needed to design such new products was common knowledge, then industry giants, like [Customers], with their vastly superior resources would design and build these new products themselves, rather than paying [Taxpayer] to do so.

...

The designs are proven effective or ineffective either during the engineering phase of the project or on the shop floor through the use of trial and error. The first production run for each unit is considered a prototype run and many of the design and manufacturability unknowns are answered at this time. Once the [prototype] has been tested and successfully validated, [Taxpayer's] commercial production commences and the qualified [research and experimentation] activity ceases.

Taxpayer explains it engages in ongoing R&D activity to quantify "sound attenuation, exhaust control, fuel tank integration, structural integrity, electrical control integration, and manufacturability." Taxpayer states that it engages in developing new and improved "power packaging systems," "engine exhaust silencers," "electrical switchgears," and "selective catalytic reduction systems." In other words, Taxpayer states its research activities are aimed at the individual component level of each generator system.

Taxpayer concludes that it engages in specialized research activities in order to assure that the individual components of each power module and generator component meet the design criteria and that the "sum" of those components meets the performance based standards dictated by each customer.

Taxpayer offered various examples of projects which buttress its claim to the credits.

(a) Mobile Power Module Project.

In support of its position that it engages in qualifying research activities, Taxpayer provided an example of a specific design project. Taxpayer explains it developed a power module that would "generate a noise level of 74 dB or lower at full [operating] load." (A 74 dB noise level is the approximate sound level of a vacuum cleaner. *Noise Level Chart*, <https://www.noisehelp.com/noise-level-chart.html> (Last visited August 17, 2020)). In addition, the design criteria mandated that each generator component module be "independently removable for service" and replacement. Taxpayer stated that its employees faced design difficulties in meeting the desired noise suppression requirements and still meet basic engineering standards.

Throughout the project, [Taxpayer] faced technical risks associated with noise levels above [desired] levels

and physical distortion of the container when lifted. To help eliminate the uncertainties with the level of noise, [Taxpayer] developed prototypes based off reviewing noise testing results from previously designed containers. After several failed iterations and trial-and-error experiments, [Taxpayer] developed a container design that did not bend or crack when lifted and [still] met the noise requirements. The final product passed all relevant [finite element analysis] and physical strength checks and featured a combination of the two satisfactory prototypes.

Taxpayer apparently argues that development of a site-specific container - to meet noise and durability standards - constitutes qualified research and that the container is a "component" of the power module unit.

(b) Power Module Meeting Canadian Environmental Standards.

In further support of its position that it routinely engages in R&D activities, Taxpayer provided a second example of a project which - according to Taxpayer - required it to conduct qualifying research activities. Taxpayer was required:

[T]o design, develop, and package a 1,000 kWh power module that met Canadian [Canadian Standards Association] electrical codes and capable of operating at -40 °F. [Taxpayer's] mechanical and electrical engineers had to design a system that could withstand the cold environment while still generating the necessary electrical output. [Taxpayer's] mechanical engineers experimented with a variety of subsystems to maintain the necessary operating temperatures, including diesel-fired jacket water heaters, ambient air heaters, motorized louvers, fuel heaters, and alternator heaters. After the experiments, [Taxpayer] determined that utilizing a diesel-fired jacket water heater was the best solution.

(c) Bespoke Power Module and Genset.

Taxpayer provided a third example of a project which - according to Taxpayer - further establishes that it engaged in qualifying research projects during the completion of that particular project. Taxpayer was required to develop a self-contained power module containing a 2 megawatt, tier four final genset (diesel engine and electric generator) which - according to Taxpayer - "had never been done before." Taxpayer states that this was the first project which allowed it to exploit its 2013 patent design for a "[p]ower system[]" with internally integrated [exhaust] aftertreatment and modular features." During the development process, Taxpayer found that a standard 53-foot ISO (International Organization for Standardization) intermodal container would not meet the applicable weight requirements. Taxpayer states that its final container design went through 82 CAD iterations before the reconfigured components met the specified requirements. Taxpayer explains that its original exhaust design would not meet Department of Transportation requirements and that "flow analysis" (e.g. fluid dynamics) computer modeling revealed that the initial exhaust system component "proved to have too much back pressure." A "compromise solution" was realized when the exhaust component was redesigned, rebuilt, and repositioned and the electrical systems components were modified to accommodate the exhaust redesign. After that issue was addressed, Taxpayer found that the rebuilt and repositioned component caused overheating of the system beyond acceptable standards. In addressing the overheating issue, Taxpayer states that it went through "three different iterations of the product layout and component location, fan size, and louver size . . ." The three CAD iterations were developed by means of Taxpayer's "computational fluid dynamic" computer analyses.

According to Taxpayer, the "final iteration allowed slow enough moving air through the louvers to prevent rain intrusion, but had enough volume to evacuate the heat produced by the [engine, alternator, switchgear, air compressor, and Tier four final exhaust]." After both the weight and overheating problems were overcome, Taxpayer found that the 53-foot, 75,000-pound prototype did not meet Department of Transportation weight distribution requirements. To address the weight distribution issue, Taxpayer developed a "virtual" model of prototype component and then redistributed individual components within that "virtual" model. According to Taxpayer, the redistribution of the virtual components led to "a totally new product design" which met the DOT weight distribution requirements.

Taxpayer states that it treats each power module and generator enclosure as a "prototype" and that any "prototype" which fails to meet the design criteria is "scrapped."

According to Taxpayer, rather than first developing physical prototypes, Taxpayer "constructs" computer models of each of its catalytic exhaust silencers. These computer models are "built" to test "backpressure and . . . flow distribution" and assure that the final product meets "required performance criteria, including emission controls . . . and meeting stringent sound attenuation specifications." Only when Taxpayer is assured that the computer prototypes meet the design specifications and government requirements, does Taxpayer begin constructing the

physical exhaust prototypes.

Taxpayer states that each of its power module and generator enclosure components is individually designed and built to meet each specific requirement. Taxpayer further adds that each power module and enclosure is "rigorously" tested in a separate testing facility to assure that the device meets the customers' applicable requirements. According to Taxpayer, its R&D activities are conducted "in a test facility separate and apart from the production building."

The Department notes here that Taxpayer claims RECs for qualifying labor expenses expended during 2014 and 2015. The fact that Taxpayer may have incurred qualifying expenses in developing the 2013 patented process is immaterial because Taxpayer may not "transplant" qualifying expenses into the year in which the patented process is eventually exploited or utilized. However, the examples cited by Taxpayer - and noted within this Letter of Findings - are intended as illustrative of Taxpayer's design, testing, and engineering processes.

2. Wage Expense Documentation.

Taxpayer disagrees with the Department's conclusion that Taxpayer failed to adequately document its employees' research activities. Taxpayer explains that it maintains contemporaneously recorded timesheets of its engineers and technicians' qualified research activities. To that end, Taxpayer presented the 2015 timesheets for one of its employees. According to Taxpayer, the sample timesheet establishes that this employee spent 85 percent of his time engaged in research and development projects and that is the identical percentage claimed in its research and development study. Taxpayer emphasized that its engineers and research technicians' R&D activities are "contemporaneously recorded" and that it has developed, maintained, and retained these contemporaneous records since 2005. Taxpayer explains:

Since 2005, [Taxpayer] has required its engineers and technicians to record all their time. They track their time each day on paper and, each week, they submit their daily reports to the engineering manager [] who then inputs their time into a master timesheet in Excel.

All time [records], including time spent on both R&D and non-R&D projects, is recorded. Also note [] on the calculations tab - the list of recorded time includes both R&D projects and other job functions such as "QUOTE-MISC" and "ENGINEERING SALES TEAM". This was done specifically to separate R&D project time vs. other non-R&D functions.

(TAXPAYER'S EMPHASIS).

Taxpayer requires its employees to daily record time spent on each qualifying project. Employee time is then compiled into weekly timesheets. To that end, Taxpayer provided copies of weekly timesheets for two of its design projects along with the summary hours for each of those same two projects. According to Taxpayer, "[T]hese contemporaneous time records may be used to corroborate the testimony of those employees as to their project activities."

C. Burden of Proof and Analysis.

1. Proving that Taxpayer is Entitled to the Credit.

Tax assessments are *prima facie* evidence that the Department's assessment of tax is presumed correct; the taxpayer bears the burden of proving that the assessment is incorrect. IC § 6-8.1-5-1(c); *Lafayette Square Amoco, Inc. v. Indiana Dep't of State Revenue*, 867 N.E.2d 289, 292 (Ind. Tax Ct. 2007).

IC § 6-3.1-4-1 provides that, "'Research expense tax credit' means a credit provided under this chapter against any tax otherwise due and payable under [IC 6-3](#)." Similar to deductions, exemptions, and exclusions, tax credits - such as RECs - "are matters of legislative grace." *Stinson Estate v. United States*, 214 F.3d 846, 848 (7th Cir. 2000).

The taxpayer who claims the tax credit is required to retain records necessary to substantiate a claimed credit. Indiana and federal law require that a taxpayer maintain and produce contemporaneous records sufficient to verify those credits. See Treas. Reg. § 1.41-4(d). (See also IC § 6-8.1-5-4(a) which requires that taxpayers keep records). Where such a credit is claimed "the party claiming the same must show a case, by sufficient evidence, which is clearly within the exact letter of the law." *Indiana Dep't. of State Revenue, Sales Tax Division v. RCA Corp.*, 310 N.E.2d 96, 100-01 (Ind. Ct. App. 1974) (citing *Conklin v. Town of Cambridge City*, 58 Ind. 130, 133

Citing *Stinson Estate*, the circuit court in *United States v. McFerrin* summarized that "[t]ax credits are a matter of legislative grace, are only allowed as clearly provided for by statute, and are narrowly construed." *United States v. McFerrin*, 570 F.3d 672, 675 (5th Cir. 2009). See also *New Colonial Ice Co. v. Helvering*, 292 U.S. 435, 440 (1934) ("Whether and to what extent deductions shall be allowed depends upon legislative grace; and only as there is clear provision therefor can any particular deduction be allowed.")

2. The Credit's Regulatory Regime.

Although the Department's audit considered the less restrictive "uncertainty test" found under Treas. Reg. § 1.41-4(a)(5) (T.D. 9104), the Department stands by its position that the "uncertainty" regulations were not in effect at the time Taxpayer lay claim to the credits here at issue. The Department has addressed this issue repeatedly and rejected the foundational issue that qualified research consists of eliminating "uncertainty." The Department has staked out this position in detail which must be emphasized but need not be repeated in detail here. See Letter of Findings 01-20171187, 01-20171188, 01-20171189, 01-20171190 (May 2, 2018), 20180725 Ind. Reg. 045180286NRA; Letter of Findings 01-20170279, 01-20170288 (October 6, 2017), 20180131 Ind. Reg. 045180014NRA; Letter of Findings 01-20160696, 01-20160697, 01-20160698, 01-20160700, 01-20160701, 01-20160702, 01-20160703 (June 27, 2017), 20170830 Ind. Reg. 045170363NRA; Letter of Findings 01-20150385 (December 12, 2016), 20170222 Ind. Reg. 045170090NRA.

As repeatedly and consistently stated in its decisions on this issue, "The Department has historically applied the 2001 final regulations, published under T.D. 8930 (the "2001 Final Regulations"). The 2001 Final Regulations define qualified research and development under I.R.C. § 41 to include a discovery requirement."

3. Indiana's Research and Expense Tax Credit.

For income tax purposes, Indiana follows the federal tax scheme with certain modifications. IC § 6-3-1-3.5(b). Indiana provides tax credits outlined in [IC 6-3-1](#) which a taxpayer may claim to reduce its taxable income. One of the tax credits is the "Indiana qualified research expense" tax credit under IC § 6-3-1-4-2(a), which states that, "A taxpayer who incurs Indiana qualified research expense in a particular taxable year is entitled to a research expense tax credit for the taxable year." IC § 6-3-1-4-1 defines the credit. In part, this statute - in effect for the taxable years in question - provides:

"Indiana qualified research expense" means qualified research expense that is incurred for research conducted in Indiana. "Qualified research expense" means qualified research (as defined in Section 41(b) of the Internal Revenue Code as in effect on January 1, 2001).

Further, "qualified research expense" under the 2003 Indiana Statute is "as defined in Section 41(b) of the Internal Revenue Code as in effect on January 1, 2001[.]" IC § 6-3-1-4-1 (2003) (*Emphasis added*). "Qualified research" is defined in the Internal Revenue Code ("IRC") under section 41(d). I.R.C. subsection 41(d) defines qualified research in pertinent part as follows:

- (d) Qualified research defined.-For purposes of this section-
 - (1) In general.-The term "qualified research" means research-
 - (A) with respect to which expenditures may be treated as expenses under section 174,
 - (B) which is undertaken for the purpose of discovering information-
 - (i) which is technological in nature, and
 - (ii) the application of which is intended to be useful in the development of a new or improved business component of the taxpayer, and
 - (C) substantially all of the activities of which constitute elements of a process of experimentation for a purpose described in paragraph.

I.R.C. § 41(d)(1).

This provision sets out a four-pronged test for qualified research. First, the research must have qualified as a business deduction under § 174. See *Id.* § 41(d)(1)(A). Second, the research must be undertaken to "discover information which is technological in nature." *Id.* § 41(d)(1)(B)(i). Third, the taxpayer must intend to use the information to develop a new or improved business component. *Id.* § 41(d)(1)(B)(ii). Finally, the taxpayer must pursue a "process of experimentation" during substantially all of the research. *Id.* § 41(d)(1)(C).

The "process of experimentation" standard may not be necessarily met by implementing a process of bare-bones "trial and error." As explained in *Union Carbide Corp. and Subsidiaries, v. C.I.R.*, 97 T.C.M. 1207 (2009), under Treas. Reg. § 1.41-4(d),

[T]he term "systematic" suggests that the project must involve a methodical plan involving a series of trials to test a hypothesis, analyze the data, refine the hypothesis, and retest the hypothesis so that it constitutes experimentation in the scientific sense. Testing and refining a hypothesis may involve determining the strengths and weakness of the alternative tested, whether and how the process could be further refined and improved, and whether other alternatives might be better suited for achieving the taxpayer's goal. While the process of experimentation need identify only one alternative, it generally should be capable of evaluating more than one alternative.

Both the Department's original audit and Taxpayer agree that Taxpayer's expenses related to the activities described above meet the "business deduction" requirement under § 174.

D. Conclusions.

Given the project descriptions provided by Taxpayer, the Department is prepared to agree that Taxpayer's activities are intended to "discover information which is technological in nature." *Id.* § 41(d)(1)(B)(i). Especially given the computer modeling and technology based efforts involved in developing its products' individual components, it is apparent that Taxpayer develops and constructs bespoke power modules and generator systems in an extended process of first developing the constituent components the evolution of which evinces a substantial degree of "technological" discovery.

The Department also agrees that Taxpayer meets the requisite "improved business component[]" standard required under § 174. Since the power modules and generator systems are developed to meet each stringent requirements, the individual components are developed and "improved" to meet those requirements. Since the completed modules and systems are also required to meet government and environmental standards, the development and design process necessarily implicates component "improvements" to meet those evolving standards.

Finally, the Department agrees that Taxpayer meets the fourth prong of the § 174 requirements because Taxpayer undertakes a process of "experimentation" (exceeding a simple trial-and-error process) in the development of each power module or generator system's components. Whether through multiple evolving CAD design stages or through computer modeling of muffler flow dynamics, Taxpayer's activities go beyond simply addressing technological "uncertainties" or determining the best method of adapting pre-existing and well-worn industry norms to the design requirements.

Taxpayer has met its burden of establishing that it engaged in qualified research activities in the development of components such as power packages, electrical switchgears, catalytic reduction systems, and environmentally compliant mufflers. Based on the information provided, the Department must - in this instance - disagree with the Department's prior conclusion that Taxpayer's argument fails because Taxpayer has a history of skill, expertise, and success. It is not known whether Taxpayer ever fails to produce and deliver a product that meets the customer's needs; it is not known whether Taxpayer ever rejects a customer proposal at the outset because Taxpayer knows the proposed project is beyond its technological or financial means. Ultimately, Taxpayer's failures are not the gauge on which to determine whether or not Taxpayer engages in activities which entitle it to the credit. A history of success and/or customer confidence does not disqualify a potential claimant from seeking and obtaining the credit.

However, the Department rejects any notion that a taxpayer may claim RECs based on - as explained in the consulting firm's report - an "employee research and experimentation time allocation questionnaire." The Department finds that it is insufficient for a claimant to depend on documentation based solely on interviews with and the recollection of its key personnel, because the assertion oversimplifies the federal and Indiana regulatory requirements. Of course, any documentation must be based on information provided by its personnel, but a taxpayer/claimant also "must retain records in sufficiently usable form and detail to substantiate that the expenditures claimed are eligible for the credit." Treas. Reg. § 1.41-4(d). The emphasis in the current regulation is that documentation must be "retained;" there is nothing to indicate that records may be recreated based on its employees' recollections. In such cases, the Department is asked to allow credits on what is essentially a "take our word for it" (TOWFIT) standard, and although the Department does not question the good faith and veracity of claimants, it does find the TOWFIT standard on which a claimant may rely unworkable, unverifiable, and inconsistent with both the law and common sense. Simply put, Department finds that reliance on the TOWFIT

standard is wholly at odds with the Indiana case law which requires that a taxpayer's claim to income tax credits must be established with "sufficient evidence" which is "clearly within the exact letter of the law." *RCA Corp.*, 310 N.E.2d at 100-01.

However, Taxpayer claims that it can document the extent to which its employees engaged in hour-by-hour and minute-by-minute research activities in the individualized development of components and that the documentation meets the Treas. Reg. § 1.41-4(d) (T.D. 8930) "contemporaneous" and "substantiation" requirements. Taxpayer states that it has prepared and preserved this documentation since 2005 and that the documentation fully meets the "early stages of the research project" standard. To that end, Taxpayer has provided certain documentation to verify this position. Taxpayer explains that its employees daily "track" the time spent on each project, "track" the time the employees spend on qualified research projects, and track the time spent on projects that do not meet the standard. Taxpayer's contention is at variance with the audit report which found that Taxpayer "did not provide any specifics concerning what employees did or how much time they spent completing qualified research." However, given the finding that Taxpayer *does* engage in qualified research on specific power module components, Taxpayer will have the opportunity to "tic and tie" its employees' timesheets with specific activities which clearly meet the "qualified" standard.

Lest there be any confusion as to the exact nature of this decision, it is important to note here the following:

- Taxpayer's protest is *not* sustained, either in whole or in part, on the ground that it is designing and building one-off power modules and generator enclosures that meet individual customer specifications;
- Taxpayer is *not* being sustained, either in whole or in part, because it builds complicated and difficult to construct electrical devices;
- Taxpayer is *not* being sustained, either in whole or in part, because it has finicky and difficult customers who demand products suited to their particular needs;
- Taxpayer is *not* being sustained, either in whole or in part, because it faced "uncertainties" in the design and construction of its products;
- Taxpayer is *not* being sustained, either in whole or in part, because its employees recalled incidents in which they engaged in qualifying activities and were able to tick off the boxes on a survey questionnaire;
- Taxpayer is *not* being sustained, either in whole or in part, because it repeatedly "explored alternatives" in developing and building its customers' products;
- Taxpayer is *not* being sustained, either in whole or in part, because it engaged in a simple "process of bare-bones 'trial and error.'"

Taxpayer is being sustained because Taxpayer established that it was conducting a methodical, systematic, experimental process by which it developed individual business components and, in the process of doing so, expanded the common knowledge of information related to those components.

To the extent that Taxpayer can verify the hours and costs claimed in the development of the qualified, constituent components by reviewing its employees' timesheets, Taxpayer's protest is sustained. The Department's Audit Division is requested to revisit Taxpayer's contemporaneously prepared employee timesheets, to grant whatever portion of the originally claimed credit Taxpayer is prepared to verify, and to deny that portion which Taxpayer is unable to verify.

FINDING

Subject to the result of the Department's supplemental review, Taxpayer's protest is sustained.

August 26, 2020

Posted: 10/28/2020 by Legislative Services Agency
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